3. The electronic device of claim 2, wherein the antenna matching circuit comprises a line that is electrically connected between the touch sensor and the ground.

4. The electronic device of claim 3, wherein the antenna matching circuit comprises at least one capacitor that is mounted on the line.

5. The electronic device of claim 1, wherein the antenna matching circuit is established by connecting at least one inductor and at least one capacitor in one of a series and a parallel configuration.

6. The electronic device of claim 1, wherein the touch sensor includes a plate having a conductive pattern.

7. The electronic device of claim 6, further comprising:

a contact configured to electrically connect the touch sensor to the input circuit,

wherein the contact is configured to make contact with the touch sensor while being deformed.

8. The electronic device of claim 7, wherein the contact comprises a C-clip.

9. The electronic device of claim 1, further comprising:

a printed circuit board (PCB) on which the input circuit is mounted,

wherein the touch sensor is mounted on the printed circuit board using a surface mounting technology (SMT).

10. The electronic device of claim 1, wherein the touch sensor comprises a plurality of conductive patterns which are arranged adjacent to and spaced apart from the window while and wherein the electronic device further comprises a plurality of contacts that are configured to electrically connect the input circuit to the plurality of conductive patterns.

11. The electronic device of claim 10, further comprising:

a PCB on which the input circuit is mounted,

wherein the PCB overlaps the window in a direction from the first side of the electronic device to the second side of the electronic device, and the plurality of contacts are disposed between the window and the PCB and are mounted to the PCB spaced apart therefrom.

12. The electronic device of claim 1, wherein the antenna radiator overlaps the touch sensor in a direction from the first side of the electronic device to the second side of the electronic device.

13. The electronic device of claim 12, wherein the ground is disposed between the touch sensor and the antenna radiator.

14. The electronic device of claim 1, wherein the electronic device further comprises a PCB, and the ground is a part of the PCB.

15. The electronic device of claim 1, further comprising:

a display extending through the first side of the housing.

16. An electronic device comprising:

a housing that includes a window that forms a first side of the electronic device, and a second side of the electronic device that is disposed opposite to the first side;

a circuit board operably disposed between the first side of the electronic device and the second side of the electronic device and including a ground;

a first conductive plate and a second conductive plate that are operably disposed between the first side of the electronic device and the circuit board and that are disposed adjacent to and spaced apart from the window;

an input circuit mounted on the circuit board and configured to detect a first input based on a variation in a capacitance of the first conductive plate and to detect a second input based on a variation in a capacitance of the second conductive plate and;

a first contact and a second contact, the first contact mounted on the circuit board and configured to electrically connect the input circuit and the first conductive plate and the second contact mounted on the circuit board and configured to electrically connect the input circuit and the second conductive plate;

an antenna radiator at least one of partially disposed inside the housing and a part of the housing;

a communication circuit mounted on the circuit board and operably connected to the antenna radiator and the ground; and

an antenna matching circuit mounted on the circuit board and operably connected to at least one of the first conductive plate and the second conductive plate and the input circuit.

17. The electronic device of claim 16, further comprising:

a through-hole formed through the window;

a button disposed within the through-hole and extending from the first side of the electronic device to the second side of the electronic device; and

a push switch mounted on the circuit board and configured to receive current by the press of the button,

wherein the push switch is operably disposed between the first contact and the second contact.

18. A method for operating an electronic device, the method comprising:

electrically connecting an antenna radiator of the electronic device to a communication circuit of the electronic device; and

electrically connecting an antenna matching circuit of the electronic device to a touch sensor of the electronic device and an input circuit of the electronic device.

19. The method of claim 18, wherein the antenna matching circuit comprises at least one inductor that is operably disposed between the touch sensor and the input circuit.

20. The method of claim 19, wherein the antenna matching circuit further comprises:

a line that is electrically connected between the touch sensor and a ground of the electronic device; and

at least one capacitor that is mounted on the line.

* * * * *